QUIZ 11 - MATH 152   Friday, December 6

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Read each problem **very carefully** before starting to solve it and do only what is asked. Each problem is worth around 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. [4 points] An ellipse has foci at (5,3) and (9,3) and semi-minor axis 1. Find an equation for the ellipse and give the location of its four vertices.

2. [6 points] Convert the following equation of a parabola into standard form.

$$y^2 - 2y + 6x + 29 = 0.$$

Then find the location of its vertex and of its focus and provide the equation of its directrix.